$f(x)$ is linear and

$f(3) = 10$

$f(-1) = -2$

Find an equation for $f(x)$

slope $= \frac{y_2 - y_1}{x_2 - x_1}$

$= \text{slope} = \underline{\underline{3}}$

$$\text{slope} = \frac{10 - (-2)}{3 - (-1)} = \frac{12}{4} = 3$$

$y = mx + b$

$y = 3x + b$

$10 = 3(3) + b$ plug in $(\overset{x}{3}, \overset{y}{10})$

$10 = 9 + b$

$b = 1$

d) $f(x)$ is linear and $f(-4) = 7 = (-4, 7)$

$f(2) = 10 = (2, 10)$ } 2 points.

$$\text{slope} = \frac{10 - 7}{2 - (-4)} = \frac{3}{6} = \underline{0.5}$$

$y = \frac{1}{2}x + b$

$10 = \frac{1}{2}(2) + b$

$10 = 1 + b$

$\underline{b = 9}$